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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/760,315

01/21/2004

Keld Lange

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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

BRANDT, CHRISTOPHER M

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

08/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/760,315

Applicant(s)

LANGE, KELD

Examiner

Christopher M. Brandt

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

This Action is in response to applicant's amendment filed on June 7, 2007. **Claims 1-10** are still pending in the present application.

Response to Arguments

Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-10 are rejected under 35 USC 103(a) as being unpatentable over **Blanke (US PG PUB 2002/0141512 A1)** in view of **Matsuki (GB 2 315 622 A)**.

Consider **claim 1**. Blanke discloses a mobile communication base station apparatus comprising a plurality of radio transmissions and/or reception sections and a plurality of

baseband processing sections comprising a user data stream interface (abstract, figure 1), the plurality of baseband processing sections being arranged in a first stage comprising baseband processing sections connected to radio transmission and/or reception sections (figure 2, paragraphs 10 and 13), each radio transmission and/or reception section being connected to at least one baseband processing section (paragraph 13), wherein

the plurality of baseband processing sections is divided into stages, arranged in said first stage and further stages (figure 2, paragraphs 10 and 13, read as baseband processing section that are further connected to other baseband processing sections)

each stage comprising at least one baseband processing section of said plurality of baseband processing sections (figure 2, paragraphs 10 and 13-14, read as baseband processing section that are further connected to other baseband processing sections), and

each baseband processing section of the further stages is connected with at least one baseband processing unit in any preceding stage, such that the baseband processing sections are multistage-connected to the first stage of the baseband processing sections (figure 2, paragraphs 10 and 13-14, read as baseband processing section that are further connected to other baseband processing sections. Blanke also discloses that computing capacity is equalized between the computing elements of several base units of the same or different baseband boards. In order for this to occur the baseband processor section must be connected to preceding baseband processing units in the preceding stages).

Blanké substantially discloses the claimed invention but fails to explicitly teach that each baseband processing section comprises adding means, dropping means, and/or routing means for

extraction and injection of baseband data streams and, respectively routing the data streams through the stages.

Matsuki discloses that each baseband processing section comprises adding means, dropping means, and/or routing means for extraction and injection of baseband data streams and, respectively routing the data streams through the stages (page 21 line 4 – page 22 line 18, read as increasing the outputs of the baseband signal producing sections, turning off the outputs of the n baseband signal producing sections and a distributing circuit).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Matsuki into the invention of Blanke in order to compensate for the failure of an amplifier in a transmitter by increasing the base band signal (page 21 line 4 – page 22 line 18).

Consider **claim 8**. Blanke discloses a baseband processing section for use in a mobile communication base station apparatus, said baseband processing section comprising an interface for user data streams (abstract), wherein said baseband processing section comprises baseband-processing-section-to-baseband process section interface for data streams transmitted and/or received between the baseband processing section and one other baseband processing section (figure 2, paragraphs 10 and 13-14, read as baseband processing section that are further connected to other baseband processing sections).

Blanke substantially discloses the claimed invention but fails to explicitly teach adding means for injecting additional data streams to received data stream, dropping means for extracting data streams from received data streams, and routing means for passing resulting data streams over said baseband-processing-section-to-baseband process section interface.

Matsuki discloses adding means for injecting additional data streams to received data stream, dropping means for extracting data streams from received data streams, and routing means for passing resulting data streams over said baseband-processing-section-to-baseband process section interface (page 21 line 4 – page 22 line 18, read as increasing the outputs of the baseband signal producing sections, turning off the outputs of the n baseband signal producing sections and a distributing circuit).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Matsuki into the invention of Blanke in order to compensate for the failure of an amplifier in a transmitter by increasing the base band signal (page 21 line 4 – page 22 line 18).

Consider **claims 2 and 9 and as applied to claims 1 and 8, respectively**. Blanke as modified by Matsuki disclose that the base station is W-CDMA NODE-B System and the adding and dropping means control the spreading and de-spreading according to code division multiple access (Blanke; figures 1 and 2, abstract, paragraph 29; Matsuki; page 14 lines 11-21).

Consider **claim 3 and as applied to claim 1**. Blanke and Matsuki disclose that the transmission and/or reception sections are decomposed into receiver modules and transmitter modules (Blanke; figure 2, paragraph 29).

Consider **claim 4 and as applied to claim 1**. Blanke as modified by Matsuki disclose that the baseband processing sections within one stage are interconnected (Blanke; figure 2 paragraphs 1 and 28).

Consider **claim 5 and as applied to claim 1**. Blanke and Matsuki disclose that the stage configuration is a matrix configuration and the number of baseband processing sections in the

stages of the baseband processing sections is constant (Blanke; figure 2, paragraphs 1 and 28, the load on the baseband processing unit is equalized among the existing processing sections).

Consider **claim 6 and as applied to claim 1**. Blanke as modified by Matsuki disclose that the routing means support load balancing on said interfaces by using corresponding interface connections (Blanke; paragraph 16).

Consider **claim 6 and as applied to claim 1**. Blanke and Matsuki disclose that the apparatus comprises detection means for detecting baseband processing sections and said routing means supports fault tolerance by using routing paths avoiding said defect baseband process sections (Blanke; paragraph 17).

Consider **claim 10 and as applied to claim 8**. Blanke as modified by Matsuki discloses that baseband processing section comprises baseband-processing-section-to-transmission-and/or-reception-sections-interface for data streams transmitted and/or received between the baseband processing section and transmission and/or reception sections (Blanke; figures 1 and 2, Matsuki; page 13 lines 1-26).

Conclusion

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Brandt whose telephone number is (571) 270-1098. The examiner can normally be reached on 7:30a.m. to 5p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.



Christopher M. Brandt

C.M.B./cmb

August 17, 2007



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600